

REMARKS

Formal Matters

Claims 29-30, 36-40, 46-49, 52-54 remain in this application. Claims 1-28, 31-35, 41-45 and 50-51 were previously canceled. Claims 29 and 39 are amended.. No new matter is added by the amendments.

Support for the amendments is found throughout the specification, and specifically at page 2, lines 32-33.

In view of the Examiner's earlier restriction requirement, applicant retains the right to present withdrawn, cancelled and unclaimed subject matter in continuing prosecution.

The Rejection Under 35 U.S.C. § 112, First Paragraph

Claim 49 is rejected under 35 U.S.C. § 112, First Paragraph allegedly because the claims recites the polynucleotide of ATCC 209779, while the original claims and specification as well as the substitute specification recite ATCC 209778.

In response, Applicants' amendment respectfully renders the rejection moot.

The Rejection Under 35 U.S.C. § 112, Second Paragraph

Claims 29, 30, 36-40 and 46-48 are rejected under 35 U.S.C. § 112, Second Paragraph allegedly as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Specifically, the Examiner has asserted that the term "specifically" in claims 29, 30 and 49 is a relative term which renders the claim indefinite. The Examiner acknowledges Applicants prior submission that one of ordinary skill would recognize the definition of specifically binds to include antibodies that can bind to a particular protein (e.g. SEQ ID NO:2), but which excludes binding to another protein (e.g., mouse patched-2). However, the Examiner remain unpersuaded because "no evidence, such as publications from the relevant literature, to support this assertion."

The Examiner has also added new grounds of rejection for Claims 29 and 39 for various reasons described in the Office Action.

In response Applicants respectfully submit the reference Burry, "Specificity Controls for Immunocytochemical Methods," *J. Histochem Cytochem.* 48(2): 163-165 (2000). On page 164, the text immediately following under the Section "Specificity of the Antibody" states: *The characterization of antibody specificity requires demonstration that the antibody binds only to the protein that contained the immunogen peptide (emphasis added).* The article further describes that antibody specificity is largely determined by the method of production, the most important of which include purification with the immunizing peptide. Moreover, this further substantiates Applicants' argument that immunoprecipitation is a suitable manner, if not preferred manner of determining antibody binding specificity. The description in Example 6 on pages 46-47 of the substitute specification clearly describes the preparation of anti-patched-2 antibodies using immunization patched-2, as well as selection of the desired antibodies that bind to patched-2. Thus, Applicants provide compelling evidence that the art recognizes that an antibody that "specifically binds" means one that uniquely binds to the identified antigen.

Responsive to the new grounds of rejection for Claims 29 and 39, Applicants' amendments render the rejection moot.

Applicants respectfully request reconsideration and withdrawal of the rejection of Claims 29, 30, 36-40 and 46-48 are rejected under 35 U.S.C. § 112, Second Paragraph.

The Rejection Under 35 U.S.C. § 103(a) over Motoyama *et al.* in view of Tso *et al.*

Claims 29, 30, 36-40, 46-49 and 52-54 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable (obvious) over Motoyama *et al.*, *Nat. Genet.* 18(2): 104-06 (1998) in view of Tso *et al.* (U.S. 5,932,448).

Specifically, the Examiner has alleged that Motoyama *et al.* teaches a mouse patched-2 polypeptide that is 89.3% similar to SEQ ID NO:2, while Tso *et al.* teaches general methods for producing bispecific antibodies.

Appl. No.: 09/990,046

Amend. dated: June 5, 2007

Response to Office Action mailed on: Dec. 22, 2006

In response, Motoyama *et al.* does not teach polypeptides having the requisite degree of identity (at least 95%) to SEQ ID NO:2. Neither reference, either separately or combine disclose or suggest antibodies that specifically bind to SEQ ID NO:2, i.e., an antibody that only binds to SEQ ID NO:2.

Applicants respectfully request reconsideration and withdrawal of Claims 29, 30, 36-40, 46-49 and 52-54 under 35 U.S.C. § 103(a) over Motoyama *et al.*, *Nat. Genet.* 18(2): 104-06 (1998) in view of Tso *et al.* (U.S. 5,932,448).

SUMMARY

Claims 29, 30, 36-40, 46, 49 and 52-54 are pending in the application.

If in the opinion of the Examiner, a **telephone conference** would expedite the prosecution of the subject application, the Examiner is **strongly encouraged** to call the undersigned at the number indicated below.

This response/amendment is submitted with a transmittal letter and petition for a 3-month extension of time and fees. In the unlikely event that this document is separated from the transmittal letter or if fees are required, applicants petition the Commissioner to authorize charging our Deposit Account 07-0630 for any fees required or credits due and any extensions of time necessary to maintain the pendency of this application.

Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,
GENENTECH, INC.

Date: June 15, 2007

By: 

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